

<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 1-22				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-C-10-060			Contract Period   11/30/2010   To   07/31/2012 Base <input checked="" type="checkbox"/> Option Period Number			Title of Work Assignment/SF Site Name WA 1-22, qPCR Alt Test Proc				
Contractor COMPUTER SCIENCES CORPORATION					Specify Section and paragraph of Contract SOW 2.8.1, 2.8.3					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance  From   09/02/2011   To   07/31/2012				
Comments: This action establishes work assignment 1-22 in Option Period 1 of the contract and requests a work plan and cost estimate for the attached PWS.										
<input type="checkbox"/> Superfund                      Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
SFO <input type="checkbox"/> Note: To report additional accounting and appropriations date use EPA Form 1900-69A.										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
11/30/2010 To 07/31/2012										
This Action:						886				
Total:						886				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:			LOE:			
Cumulative Approved:				Cost/Fee:			LOE:			
Work Assignment Manager Name   Robin Oshiro							Branch/Mail Code:			
_____ (Signature)                      (Date)							Phone Number   202-566-1075			
							FAX Number:			
Project Officer Name   Nancy Muzzy							Branch/Mail Code:			
_____ (Signature)                      (Date)							Phone Number: 513-569-7864			
							FAX Number:			
Other Agency Official Name							Branch/Mail Code:			
_____ (Signature)                      (Date)							Phone Number:			
							FAX Number:			
Contracting Official Name   Cathy Basu							Branch/Mail Code:			
_____ (Signature)                      (Date)							Phone Number: 513-487-2042			
							FAX Number:			

**WORK ASSIGNMENT  
PERFORMANCE WORK STATEMENT**

**Contract No.** EP-C-10-060

**Work Assignment:** 1-22

**WAM: Name** Robin K. Oshiro

**Branch** EASB

**Office of Science and Technology**

**Engineering and Analysis Division, Office of Water**

**Phone:** (202) 566-1075

**FAX:** 202-566-1053

**E-mail:** Oshiro.robin@epa.gov

**Mail code:** 4303-T

**1200 Pennsylvania Ave., NW**

**Washington, DC 20460**

**Alternate WAM:** N/A

**Task Managers:** N/A

**LOE:** 886 hours

**Period of Performance:** Contracting Officer approval to July 31, 2012

**Title:** qPCR Alternate Test Procedure for IAC

**PWS Sections:** 2.8.1, 2.8.3

**I. PURPOSE:**

The purpose of this work assignment is to validate an alternate version of the qPCR test for Enterococcus in fresh and marine waters using two modifications, an internal amplification control (IAC) and a different master mix. The Agency is interested to know if this alternate version can produce the same or better results than the original version of the method (Method A: Enterococci in Water by TaqMan® Quantitative Polymerase Chain Reaction (qPCR) Assay (EPA-821-R-10-004)). To achieve this purpose the contractor shall be expected to collect fresh and marine water samples, and assay those samples using both the original version of the method and the alternate version containing the IAC and the different master mix. The intended audience for this project is the voluntary laboratory participants. This project supports programmatic support needs related to our national all hazards homeland security responsibilities by determining whether or not the qPCR test for Enterococci can be enhanced with the addition of these changes. There are no other partners or external offices or agencies that need to be included in coordination with this work assignment.

**II. BACKGROUND:**

Currently, EPA has a qPCR method for Enterococci (Method A) that lacks an internal control for

inhibition. EPA has developed this control, called the internal amplification control (IAC). In addition, EPA has data showing that the use of a different master mix (the cocktail of chemicals used in the qPCR test) appears to enhance the performance of the test. However, EPA has not validated these modifications to the method. As a result, stakeholders may not use them. This WA will answer the question about whether or not these modifications to the qPCR test will result in equal or better performance of the method.

### **III. QA REQUIREMENTS:**

The tasks in this work assignment require the use of primary data. Consistent with the Agency's quality assurance (QA) requirements, the contractor must prepare a complete Quality Assurance Project Plan (QAPP) to assure the quality of the data used under this work assignment. Work on these tasks cannot proceed until the contractor receives notification of QAPP approval from the PO via e-mail. The project specific quality assurance requirements must be addressed in the work plan and monthly progress reports as specified under Task 0, below.

### **IV. DETAILED TASK DESCRIPTION:**

All direction under this work assignment will be provided as written technical direction from the Work Assignment Manager, as appropriate. If provided first as verbal technical direction to the contractor, it will be confirmed in writing within 5 calendar days, with a copy to the Project Officer and the Contracting Officer, and is subject to the limitations of the technical direction contract clause. Each initial deliverable shall be provided to the EPA Work Assignment Manager (WAM) and EPA Project Officer (PO) in draft form for review and comment. The contractor shall incorporate WAM review comments into revisions of the drafts. All drafts and final reports shall be approved by the WAM.

The contractor shall perform the following tasks:

#### **Task 0: Work Plan, Progress evaluations, and Monthly Progress Reports**

The contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. If a subcontractor(s) is proposed and subcontractors are outside the metropolitan DC area, the contractor shall include information on plans to manage work and contract costs. The work plan shall also provide an analysis of the existing and projected constraints, and the feasibility of accomplishing the project's purpose.

In addition, the contractor shall prepare a project specific quality assurance project plan (QAPP) (noted above), and ensure the quality of data used to complete these tasks. A study plan which explains the purpose, technical approach, data reporting and validation, and data evaluation steps to be completed during the study is required as part of the QAPP and shall be prepared and approved prior to the preparation of the QAPP. The work plan shall explain when the QAPP will be submitted based on the specific data requirements of the WA. Work on these tasks cannot proceed until the contractor receives notification of the new QAPP approval from the PO

via e-mail. This task also includes monthly progress and financial reports. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved. Monthly financial reports must include a table with the invoice LOE and costs broken out by the tasks in this WA.

In addition, in each monthly progress report, the contractor shall, at the introduction to the discussion of this work assignment, discuss actual progress toward achieving the purpose of this work assignment, including problems encountered, issues that may need to be resolved, and anticipated timing for completing the goals of the work assignment. The contractor shall provide an overview of contract projects, striving to implement efficiencies in performance when complimentary requirements are issued. The contractor shall assure that duplication of effort relative to other ongoing work assignments under this contract is not occurring.

Deliverables: Work plan and monthly progress and financial reports.

### **Task 1**

The contractor shall provide necessary technical and scientific support services related to analytical (test) methods evaluation of the addition of the IAC, and the substitution of the Environmental Master Mix for the Universal Master Mix for qPCR analysis using EPA Method A for *Enterococcus* in fresh and marine ambient water samples. Native samples will be analyzed both unfiltered (water) and filtered (filters) at these times. The types of services required, in accordance with technical direction, include the following.

The contractor shall provide logistical, analytical and technical support services including but not limited to drafting study plans, study instructions and a study report (up to 2 versions per document), study coordination, overseeing of laboratory analysis, data review and analyses, database development and management, and statistical analyses. The contractor shall, as part of the QA specified in the QAPP, create an Excel spreadsheet (QA file) containing all of the study data (from the original raw data) which shall contain a tab verifying the data.

Deliverables: Study plan, study instructions, draft/final study report, original raw data & QA file.

## **V. SCHEDULE/DELIVERABLES**

### **Task 0**

- a. Work Plan. Due: Within 20 calendar days from receipt of the work assignment.
- b. Study Plan. Due: Within 20 working days of WP approval.
- c. QAPP. Due: Within 15 working days from approval of study plan.
- d. Monthly progress and financial reports. Due: Monthly.

### **Task 1**

- a. Study instructions. Due: Intermittently, as required, based on the progress of the laboratories and technical direction.
- b. Draft study report. Due: Three weeks after last data point is received from the labs.

- c. Original raw data and QA files. Due concurrent with draft study report.
- d. Final study report. Due: One week after receiving comments on draft report from EPA WAM.

## **VI. REPORTING REQUIREMENTS**

Monthly Progress Reports (including a progress evaluation discussion)

Financial Reports

Project Specific QAPP

## **VII. GREEN MEETINGS AND CONFERENCES**

The contractor shall follow the provision of EPA prescription 1523.703-1, *Acquisition of environmentally preferable meeting and conference services (May 2007)*, for the use of off-site commercial facilities for an EPA event, whether the event is a meeting, conference, training session, or other purpose. Environmental preferability is defined at FAR 2.101, and shall be used when soliciting quotes or offers for meeting/conference services on behalf of the Agency.

**QUALITY ASSURANCE SURVEILLANCE PLAN**  
**for the Water Security Division's**  
**Technical, Analytical, and Regulatory Mission Support**  
**Performance Work Statement**

**Quality Assurance Surveillance Plan**

The requirements contained in this work assignment are considered performance-based, focusing on the Agency's desired results and outcomes. The contractor shall be responsible for determining the most effective means by which these requirements will be fulfilled. In order to fulfill the requirements, the contractor shall design innovative processes and systems that can deliver the required services in a manner that will best meet the Agency's performance objectives. This performance-based requirement represents a challenge to the contractor to develop and apply innovative and efficient approaches for achieving results and meeting or exceeding the performance objectives, measures, and standards described below. The Contractor's performance will be reflected in the positive or negative evaluation offered by the Agency in the Contractor Performance Evaluation (CPE) which is evaluated annually (per the "Contractor Performance Evaluation" clause in the contract). The Work Assignment Manager shall submit a complete annual review of the areas outlined in the Quality Assurance Surveillance Plan (QASP), included in the contract, which will then be utilized by the Project Officer in preparing the overall evaluations submitted annually in response to the Contractor Performance Evaluation requirements in the contract.

General Management and Administration			
Performance Requirement	Measurable Performance Standards	Surveillance Methods	Incentives/Disincentives
<b>Management and Communications:</b> The Contractor shall maintain contact with the EPA CO, PO and WAM throughout the performance of the contract and shall immediately bring potential problems to the attention of the appropriate EPA WAM. In cases where issues have a direct impact on project schedules or cost, the contractor shall provide options for EPA's consideration on resolving or mitigating the impacts.	Any issues that impact project schedules or cost shall be brought to the attention of the appropriate EPA WAM within 3 business days of occurrence.	100% of active work assignments under the contract will be reviewed by the EPA WAM monthly (via monthly progress report) to identify unreported issues. The EPA WAM will report any issues to the EPA PO who will bring the issue(s) to the Contractor's attention through the CO.	<b>Unsatisfactory</b> rating under the category of Business Relations in the NIH Performance Evaluation System if two or more incidents occur during an applicable period of performance when the contractor does not meet the measurable performance standards for a given contract period.

<p><b>Timeliness:</b> Services and deliverables shall be in accordance with schedules stated in each work assignment or tasking document, unless amended or modified by an approved EPA action.</p>	<p>During any period of performance, 90% of all submitted deliverables shall be submitted no later than 5 business days past the due date.</p>	<p>100% of active work assignments under the contract will be reviewed by the EPA WAM monthly (via monthly progress report &amp; milestones established for each deliverable) to compare actual delivery dates against those approved. The EPA WAM will report any issues to the EPA PO who will bring the issue(s) to the Contractor's attention through the CO.</p>	<p><b>Unsatisfactory</b> rating under the category of Timeliness in the NIH Performance Evaluation System when the contractor does not meet the measurable performance standards during an applicable period of performance.</p>
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<p><b>Cost Management and Control:</b> The Contractor shall monitor, track and accurately report level of effort, labor cost, other direct cost and fee expenditures to EPA through progress reports and approved special reporting requirements.</p> <p>The Contractor shall assign appropriately leveled and skilled personnel to all tasks, practice and encourage time management, and ensure accurate and appropriate time keeping.</p>	<p>The contractor shall manage costs to the level of approved ceiling on the work assignment. The contractor shall notify the WAM/PO when 75% of the approved funding ceiling for the work assignment is reached.</p>	<p>The EPA PO will routinely meet with the Contractor's Project Manager to discuss the work progress and contract and individual work assignment expenditures. The EPA PO shall review the Contractor's monthly progress reports and request the WAMs verification of expenditures and technical progress before authorizing invoice payments.</p>	<p><b>Unsatisfactory</b> rating under the category of Cost Control in the NIH Performance Evaluation System when the contractor does not meet the measurable performance standards during an applicable period of performance.</p>
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<p><b>Technical Effort:</b> The analyses or products developed by the contractor shall be factual and defensible and based on sound science and engineering. All data shall be collected from reputable sources and quality assurance measures shall be conducted in accordance with contract, agency requirements and any additional requirements outlined in individual work assignments or technical directives. Any work requiring the contractor to provide options or recommendations shall include the rationale used in selecting the option/recommendation and all other options and recommendations considered.</p>	<p>All analyses conducted for EPA by the Contractor must be factual and based on sound science and engineering. All analyses and products (initial and final drafts) shall conform in format and content to requirements specified by the WAM in written technical direction, and should meet the objectives stated in the work assignment. All initial draft documents shall be clearly written at a level appropriate to the targeted audience. All information shall be factual, technically sound, and accurate, with data sources identified.</p> <p>Draft versions of a document shall require no more than two editorial revisions.</p>	<p>EPA will review all analyses and work products conducted by the Contractor and will independently consider the merit. EPA may opt to peer review analyses to further validate merit.</p> <p>The EPA WAM/TM (Task Manager) will review initial drafts to assess technical accuracy and editorial quality. The WAM/TM will identify all inaccuracies and needed edits and corrections to the contractor in the initial review of draft documents.</p>	<p><b>Unsatisfactory</b> rating under the category of <b>QUALITY OF PRODUCT OR SERVICE</b> in the NIH Performance Evaluation System when the contractor does not meet the measurable performance standards during an applicable period of performance, even after review input and follow up discussion by Agency personnel.</p>
<p><b>Socio-Economic Utilization:</b> The Contractor shall assess all agency requirements outlined in work assignments for opportunities to fully utilize the knowledge and experience of its socio-economic team members. Work shall be allocated in a manner that ensures the Contractor's annual subcontracting goals are met.</p>	<p>The Contractor shall meet a standard of at least 80% of the dollar goals outlined in their subcontracting plan during each period of performance, unless Agency priorities prevent or preclude such tasking.</p>	<p>EPA will monitor the contractor's utilization of socio-economic firms by reviewing the contractor's submittal of Standard Forms (SF) 294 and (SF) 295.</p>	<p>If less than 80% is reached during an applicable period of performance, the contractor shall outline the steps that will be taken to meet the annual goals outlined in their plan, or provide justification as to the rationale for the lack of meeting the subcontracting plan goals. Performance that does not meet the stated goals without sufficient justification will be reported as an <b>Unsatisfactory</b> rating under the category of <b>BUSINESS RELATIONS, and MEETING SDB SUBCONTRACTING REQUIREMENTS</b> in the NIH Performance Evaluation System.</p>

<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 1-22				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000001				
Contract Number EP-C-10-060			Contract Period 11/30/2010 To 07/31/2012			Title of Work Assignment/SF Site Name				
			Base                      Option Period Number    1			qPCR Alternate Test Procedure				
Contractor COMPUTER SCIENCES CORPORATION					Specify Section and paragraph of Contract SOW 2.8.1, 2.8.3					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out					Period of Performance					
<input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding										
<input type="checkbox"/> Work Plan Approval					From 09/02/2011 To 07/31/2012					
Comments: This action fully funds the work plan at a cost amount of \$179,897 and a total LOE of 1,066 technical labor hours , and a total LOE of 1,104 LOE.										
<input type="checkbox"/> Superfund                      Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations date use EPA Form 1900-69A.										
SFO (Max 2) <input type="checkbox"/>										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE:		886		
11/30/2010 To 07/31/2012										
This Action:						0				
Total:						886				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Robin Oshiro						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number 202-566-1075				
						FAX Number:				
Project Officer Name Nancy Muzzy						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number: 513-569-7864				
						FAX Number:				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name Cathy Basu						Branch/Mail Code:				
_____ (Signature)                      (Date)						Phone Number: 513-487-2042				
						FAX Number:				

<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 1-22				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000002				
Contract Number EP-C-10-060			Contract Period   11/30/2010   To   07/31/2012 Base                      Option Period Number      1			Title of Work Assignment/SF Site Name qPCR Alternate Test Procedures				
Contractor COMPUTER SCIENCES CORPORATION					Specify Section and paragraph of Contract SOW 2.8.1, 2.8.3					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance  From   09/02/2011   To   07/31/2012				
Comments: The purpose of this amendment is to establish a funding ceiling specifically for material purchases at \$60,000. This action explicitly separates the funding , consistent with the appropriation of money utilized.										
<input type="checkbox"/> Superfund    Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations date use EPA Form 1900-69A.										
SFO (Max 2) <input type="checkbox"/>										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
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4										
5										
Authorized Work Assignment Ceiling										
Contract Period:                      Cost/Fee:                      LOE: 11/30/2010   To   07/31/2012										
This Action:  										
Total:										
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:                      Cost/Fee:                      LOE:										
Cumulative Approved:                      Cost/Fee:                      LOE:										
Work Assignment Manager Name   Robin Oshiro  <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number   202-566-1075 FAX Number:			
Project Officer Name   Nancy Muzzy  <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: 513-569-7864 FAX Number:			
Other Agency Official Name  <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: FAX Number:			
Contracting Official Name   Cathy Basu  <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: 513-487-2042 FAX Number:			